

ABSTRACT OF THE DISCLOSURE

The optical WG device comprises two optical WGs and an optical coupler extending between the adjacent ends of the WGs. The optical coupler comprises material that includes a waveguide region. The waveguide region has a shape
5 defined by overlapping cones of light emitted from the ends of the optical waveguides. In the optical alignment method, first and second optical waveguides are axially aligned, leaving a gap between their adjacent ends. The gap is filled with material having a refractive index capable of being increased by exposing the material to light. The material is exposed to conical beams of light emitted from the
10 adjacent ends of the waveguides. Exposing the material increases the refractive index of the material in a region in which the beams of light overlap. The resulting refractive index difference prevents light from diverging as it propagating across the gap between adjacent ends of the optical waveguides.

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